### **Comparisons of Job Characteristics**

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

### Knowledge

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations		Focus Occupation's Rating		Evaluation of Focus Occupation	
Mechanical	6.8	22.8	13.9	<<	Extensive education and/or training may be required	
Design	5.2	13.5	8.3	<<	Extensive education and/or training may be required	
Engineering and Technology	5.7	12.3	4.3	<<	Extensive education and/or training may be required	
Physics	4.3	10.9	3.9	<<	Extensive education and/or training may be required	
Chemistry	4.8	10.6	6.5	<<	Extensive education and/or training may be required	
Transportation	4.6	9.8	3.4	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Skills**

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Equipment Maintenance	3.5	17.2	7.1	Extensive development of skills in this area may be required	
Repairing	3.4	15.9	7.1	Extensive development of skills in this area may be required	
Troubleshooting	4.5	13.9	9.1	Extensive development of skills in this area may be required	

Operation Monitoring	6.6	13.5	9.6	<<	Extensive development of skills in this area may be required
Quality Control Analysis	5.9	12.8	11.4	<	A higher skill level may be required
Equipment Selection	3.3	9.1	7.3	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

#### Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Finger Dexterity	7.6	14.8	11.4	<<	Extensive improvement in abilities may be required	
Control Precision	6.6	14.4	10.1	<<	Extensive improvement in abilities may be required	
Problem Sensitivity	11.1	14.4	11.6	<	Some improvement in abilities may be required	
Manual Dexterity	6.5	13.9	10.8	<<	Extensive improvement in abilities may be required	
Information Ordering	9.9	12.8	11.5	<	Some improvement in abilities may be required	
Arm-Hand Steadiness	6.8	12.2	9.6	<	Some improvement in abilities may be required	
Flexibility of Closure	7.8	11.1	8.3	<<	Extensive improvement in abilities may be required	
Perceptual Speed	7.4	10.7	8.6	<	Some improvement in abilities may be required	
Visual Color Discrimination	6.4	10.7	9.1	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 96

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Adjust or set mechanical controls or components	69
Align or adjust clearances of mechanical components or parts	72
Align or adjust clearances of vehicle body parts or components	78
Apply cleaning solvents	41
Apply protective coating to products	84

Build or repair structures in construction, repair, or manufacturing setting	54
Cut metal or plastic	77
Examine products or work to verify conformance to specifications	15
Fabricate aircraft parts	99
Fabricate, assemble, or disassemble manufactured products by hand	11
File, sand, grind, or polish metal or plastic objects	82
Identify base metals for welding	68
Identify properties of metals for repair or fabrication activities	71
Lay out machining, welding or precision assembly projects	63
Lubricate machinery, equipment, or parts	59
Make independent judgment in assembly procedures	64
Move or fit heavy objects	8
Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read schematics	34
Read specifications	23
Read technical drawings	7
Read work order, instructions, formulas, or processing charts	9
Repair or replace malfunctioning or worn mechanical components	62
Set up and operate variety of machine tools	62
Solder metal parts or components together	73
Stretch, bend, straighten, shape, pound, or press metal or plastic	84
Test mechanical products or equipment	56
Understand service or repair manuals	40
Understand technical operating, service or repair manuals	6
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use knowledge of metric system	39
Use machine tools in installation, maintenance, or repair	72
Use pneumatic tools	66
Use precision measuring tools or equipment	17
Use soldering equipment	44
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

# **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 79

Focus Occupation: Aircraft Structure, Surfaces, Rigging, and Systems Assemblers (51-2011) Associated Occupation: Aircraft Mechanics and Service Technicians (49-3011)

Tools and Technologies	Exclusivity
Computers	1
Data management and query software	1
Drafting supplies	9

Fastener setting tools	12
Forming tools	2
Hearing protectors	12
Holding and clamping tools	3
Holding and positioning and guiding systems and devices	23
Industry specific software	1
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Non destructive examination equipment	13
Pneumatic tools	8
Power tools	2
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.